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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,425	06/24/2003	Jerry Ditter	PALL.107C1	3308

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EXAMINER
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CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/603,425

Applicant(s)

DITTER ET AL.

Examiner

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/29/03</u> . | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

1. Claims 1-20 are pending in the application.

#### *Claim Objections*

2. Claim 15 is objected to because of the following informalities: polyarylsulfone is repeated twice in the Markush group. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 contains the trademark/trade name Mylar. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or

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trade name. In the present case, the trademark/trade name is used to identify/describe a layer and, accordingly, the identification/description is indefinite.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chau et al. (U.S. Patent No. 4,873,073).

Regarding Applicant's claim 1, Chau discloses a filter laminate (*col. 1, lines 8-10*) comprising any arrangement of plurality of discrete layers (*figures 2a and 2b*) comprising a first membrane layer comprising a first membrane and at least a second membrane comprising a second membrane and a bond between each of the adjacent layers (*col. 3, lines 11-32 and col. 6, line 67 through col. 7, line 18*).

The limitation "wherein the bond is formed after each of the layers is formed" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art

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structure and the structure resulting from the claimed method because Chau discloses multilayered membrane.

Regarding Applicant's claims 2-4, Chau discloses that the first and second membrane's are asymmetric (*col. 3, line 12*).

Regarding Applicant's claim 15, Chau discloses that the first membrane comprises a polymer selected from the group consisting of polyvinylidene fluoride, polyarylsulfone, polyethersulfone, polyamides and cellulosic derivative (*col.4, lines 60 through col. 5, line 18*).

Regarding Applicant's claims 16-18, Chau discloses that the filter further comprises a layer comprising a material selected from the group consisting of polyester, polypropylene, polyolefin, polyethylene, nylon, paper, cellulose, glass fiber, acrylic, and Mylar and/or selected from the group consisting of nonwoven fibrous material, woven fibrous material, web material, sheet material, calendared material, wet laid material, dry laid material, and extruded material (*col.4, lines 60 through col. 5, line 18 and col. 6, line 67 through col. 7, line 18*).

Regarding Applicant's claim 19, Chau disclose a filter laminate comprising in any arrangement a first distinct layer of material having a first asymmetric membrane, a second distinct layer of material having a second membrane, and a third distinct layer of material having a third membrane, wherein each layer is adjacent to at least one other layer and are secured by a bond (*figures 2a and 2b*).

Regarding Applicant's claim 20, Chau discloses a filter laminate comprising at least three discrete layers of material each layer being adjacent to and bonded to at least one other layer, wherein at least two of the layers comprise membranes and wherein none of the layers function s only as a bonding layer (*figures 2a and 2b*).

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The limitation “bonded to at least one layer after formation of after each of said layers” is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113. Furthermore, there does not appear to be a difference between the prior art structure and the structure resulting from the claimed method because Chau discloses multilayered membrane.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Chau in view of Dennison et al. (U.S. Patent No. 5,006,247).

Chau is relied upon as described above.

Chau fails to disclose that the first membrane has a first surface and a second surface, each of the surfaces comprising pores, wherein the pores of the second surface have an average diameter at least about 5 times greater than an average diameter of the pores of the first surface.

Dennison discloses an asymmetric porous membrane (*title*) having a membrane with a first surface and a second surface, each of the surfaces comprising pores, wherein the pores of

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the second surface have an average diameter at least about 5 or times greater than an average diameter of the pores of the first surface (*col. 8, lines 35-38*). The first membrane further comprises a support structure between the first and second surface, which comprises a reticular network of flow channels connecting the pores of the first surface with the pores to the second surface (*col. 8, lines 30-60*). The flow channels substantially increase gradually in diameter between the first and second surfaces (*col. 8, lines 35-38*). The diameter of the pores on the first surface are about 0.01 to about 10.0  $\mu\text{m}$  or less than about 0.01  $\mu\text{m}$  (*col. 8, lines 35-38*). The membrane is useful as a microfiltration or ultrafiltration separation processes (*col. 3, lines 16-18*).

Chau and Dennison are analogous because discloses porous membranes in filters.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Dennison asymmetric porous membrane as the porous membrane in Chau in order to make the filter useful in microfiltration or ultrafiltration.

9. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau in view of Demmer et al. (U.S. Patent No. 5,547,575).

Chau is relied upon as described above.

Chau fails to disclose that the laminate further comprises a hot melt adhesive.

Demmer discloses a porous membrane for a microfilter (*example 5*) comprises hot melt adhesive for bonding the layers together (*col. 6, lines 28-37*).

Chau and Demmer are analogous because discloses porous membranes in filters.

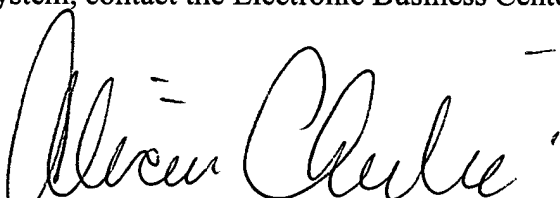
It would have been obvious to one of ordinary skill in the art at the time of the invention to add a hot melt adhesive as taught by Demmer to Chau in order to bond the layers together.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alicia Chevalier

6/23/05